

DRAFT

NOV 06 1990

Harrison Gas Plant
3-29-91

CONFIDENTIAL - NOT FOR PUBLIC RELEASE

Scoresheets

217441



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Site Name: Harrison Gas Plant

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Date: 3-29-91

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GENERAL INFORMATION (continued)

Source Descriptions:

The site encompasses ~ 26 acres. It is estimated that ~ 15 acres are contaminated with petroleum products and oil gas manufacturing wastes. Contamination probably exists as soil and groundwater contamination.

Waste Characteristics (WC) Calculations:

(See PA Table 1, page 5)

15 acres contaminated \Rightarrow WC = 18

WC =

18

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Site Name: *Harrison Gas Plant*Date: *3-29-91*

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PA TABLE 1: WASTE CHARACTERISTICS (WC) SCORES

PA Table 1a: WC Scores for Single Source Sites and Formulas for Multiple Source Sites

T I E R	SOURCE TYPE	SINGLE SOURCE SITES (assigned WC scores)			MULTIPLE SOURCE SITES
		WC = 18	WC = 32	WC = 100	
CONSTITUENT	N/A	≤ 100 lbs	> 100 to 10,000 lbs	> 10,000 lbs	lbs ÷ 1
WASTEWATER	N/A	≤ 500,000 lbs	> 500,000 to 50 million lbs	> 50 million lbs	lbs ÷ 5,000
V O L U M E	Landfill	≤ 6.75 million ft ³ ≤ 250,000 yd ³	> 6.75 million ft ³ to 675 million ft ³ > 250,000 to 25 million yd ³	> 675 million ft ³ > 25 million yd ³	ft ³ ÷ 67,500 yd ³ ÷ 2,500
	Surface impoundment	≤ 6,750 ft ³ ≤ 250 yd ³	> 6,750 ft ³ to 675,000 ft ³ > 250 to 25,000 yd ³	> 675,000 ft ³ > 25,000 yd ³	ft ³ ÷ 67.5 yd ³ ÷ 2.5
	Drums	≤ 1,000 drums	> 1,000 to 100,000 drums	> 100,000 drums	drums ÷ 10
	Tanks and non-drum containers	≤ 50,000 gallons	> 50,000 to 5 million gallons	> 5 million gallons	gallons ÷ 500
	Contaminated soil	≤ 6.75 million ft ³ ≤ 250,000 yd ³	> 6.75 million ft ³ to 675 million ft ³ > 250,000 to 25 million yd ³	> 675 million ft ³ > 25 million yd ³	ft ³ ÷ 67,500 yd ³ ÷ 2,500
	Pile	≤ 6,750 ft ³ ≤ 250 yd ³	> 6,750 ft ³ to 675,000 ft ³ > 250 to 25,000 yd ³	> 675,000 ft ³ > 25,000 yd ³	ft ³ ÷ 67.5 yd ³ ÷ 2.5
A R E A	Landfill	≤ 340,000 ft ² ≤ 7.8 acres	> 340,000 to 34 million ft ² > 7.8 to 780 acres	> 34 million ft ² > 780 acres	ft ² ÷ 3,400 acres ÷ 0.078
	Surface impoundment	≤ 1,300 ft ² ≤ 0.029 acres	> 1,300 to 130,000 ft ² > 0.029 to 2.9 acres	> 130,000 ft ² > 2.9 acres	ft ² ÷ 13 acres ÷ 0.00029
	Contaminated soil	≤ 3.4 million ft ² ≤ 78 acres	> 3.4 million to 340 million ft ² > 78 to 7,800 acres	> 340 million ft ² > 7,800 acres	ft ² ÷ 34,000 acres ÷ 0.78
	Pile*	≤ 1,300 ft ² ≤ 0.029 acres	> 1,300 to 130,000 ft ² > 0.029 to 2.9 acres	> 130,000 ft ² > 2.9 acres	ft ² ÷ 13 acres ÷ 0.00029
	Land treatment	≤ 27,000 ft ² ≤ 0.62 acres	> 27,000 to 2.7 million ft ² > 0.62 to 62 acres	> 2.7 million ft ² > 62 acres	ft ² ÷ 270 acres ÷ 0.0062

1 ton = 2,000 lbs = 1 yd³ = 4 drums = 200 gallons

* Use area of land surface under pile, not surface area of pile.

PA Table 1b: WC Scores for Multiple Source Sites

WQ Total	WC Score
> 0 to 100	18
> 100 to 10,000	32
> 10,000	100

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Site Name: *Harrison Gas Plant*Date: *3-29-91*

GROUND WATER PATHWAY SCORESHEET

Pathway Characteristics	
Do you suspect a release (see Ground Water Pathway Criteria List, page 7)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Is the site located in karst terrain?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Depth to aquifer:	<i>< 10 ft.</i>
Distance to the nearest drinking-water well:	<i>2.8 mi.</i>

LIKELIHOOD OF RELEASE

	A Suspected Release	B No Suspected Release	References
1. SUSPECTED RELEASE: If you suspect a release to ground water (see page 7), assign a score of 550. and use only column A for this pathway.	550		
2. NO SUSPECTED RELEASE: If you do not suspect a release to ground water, and the site is in karst terrain or the depth to aquifer is 70 feet or less, assign a score of 500; otherwise, assign a score of 340. Use only column B for this pathway.		500 = 340	
LR =	550		

TARGETS

3. PRIMARY TARGET POPULATION: Determine the number of people served by drinking water from wells that you suspect have been exposed to hazardous substances from the site (see Ground Water Pathway Criteria List, page 7). _____ people x 10 =	0		
4. SECONDARY TARGET POPULATION: Determine the number of people served by drinking water from wells that you do NOT suspect have been exposed to hazardous substances from the site, and assign the total population score from PA Table 2. Are any wells part of a blended system? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, attach a page to show apportionment calculations.	1		
5. NEAREST WELL: If you have identified any Primary Targets for ground water, assign a score of 50; otherwise, assign the highest Nearest Well score from PA Table 2. If no drinking-water wells exist within 4 miles, assign a score of zero.	3		
6. WELLHEAD PROTECTION AREA (WHPA): Assign a score of 20 if any portion of a designated WHPA is within 1/4 mile of the site; assign 5 if from 1/4 to 4 miles.	0		
7. RESOURCES: A score of 5 is assigned.	5	5	
T =	9		

WASTE CHARACTERISTICS

8. A. If you have identified any Primary Targets for ground water, assign the waste characteristics score calculated on page 4, or a score of 32, whichever is GREATER: do not evaluate part B of this factor.	100 = 32		
8. B. If you have NOT identified any Primary Targets for ground water, assign the waste characteristics score calculated on page 4.	100, 32 = 18	100, 32 = 18	
WC =	18		

GROUND WATER PATHWAY SCORE:

$$\frac{LR \times T \times WC}{82,500}$$

SUBJECT TO A MAXIMUM OF 100

1.05

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LEASE

Site Name:

PA TABLE 2: VALUES FOR SECONDARY GROUND WATER TARGET POPULATIONS

PA Table 2a: Non-Karst Aquifers

Distance from Site	Population	Nearest Well (choose highest)	Population Served by Wells Within Distance Category										Population Value
			1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	
0 to ¼ mile	_____	20	1	2	5	18	52	163	521	1,633	5,214	16,325	_____
> ¼ to ½ mile	_____	18	1	1	3	10	32	101	323	1,012	3,233	10,121	_____
> ½ to 1 mile	_____	9	1	1	2	5	17	52	167	522	1,668	5,224	_____
> 1 to 2 miles	_____	5	1	1	1	3	9	29	94	294	939	2,938	_____
> 2 to 3 miles	<u>30</u>	3	1	1	1	2	7	21	68	212	678	2,122	<u>1</u>
> 3 to 4 miles	_____	2	1	1	1	1	4	13	42	131	417	1,306	_____
Nearest Well =		<u>3</u>											Score = <u>1</u>

PA Table 2b: Karst Aquifers

Distance from Site	Population	Nearest Well (use 20 for karst)	Population Served by Wells Within Distance Category										Population Value
			1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	
0 to ¼ mile	_____	20	1	2	5	16	52	163	521	1,633	5,214	16,325	_____
> ¼ to ½ mile	_____	20	1	1	3	10	32	101	323	1,012	3,233	10,121	_____
> ½ to 1 mile	_____	20	1	1	3	8	26	82	261	816	2,607	8,162	_____
> 1 to 2 miles	_____	20	1	1	3	8	26	82	261	816	2,607	8,162	_____
> 2 to 3 miles	_____	20	1	1	3	8	26	82	261	816	2,607	8,162	_____
> 3 to 4 miles	_____	20	1	1	3	8	26	82	261	816	2,607	8,162	_____
Nearest Well =													Score =

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Site Name: Harrison Gas Plant
Date: 3-29-91

SURFACE WATER PATHWAY

Pathway Characteristics

Yes ☒ No

$$\underline{0-1800}$$

100

nearest fishery? 0 miles nearest sensitive environment? 4.6 miles

A	B
<i>Suspected Release</i>	<i>No Suspected Release</i>
560	
550	
	500, 600, 300 or 1000
	500, 600, 300 or 1000
560	
550	

LR =

3. Determine the water body types, flows (if applicable), and number of people served by all drinking-water intakes within the 15-mile target distance limit. If there are no drinking-water intakes within the target distance limit, assign a total Targets score of 5 at the bottom of this page (Resources only) and proceed to page 14.

Intake Name	Water Body Type	Flow	People Served
None		cfs	
		cfs	
		cfs	

4. **PRIMARY TARGET POPULATION:** If you suspect any drinking-water intake listed above has been exposed to hazardous substances from the site (see Surface Water Pathway Criteria List, page 11), list the intake name(s) and calculate the factor score based on the number of people served.

people x 10 =

5. **SECONDARY TARGET POPULATION:** Determine the Secondary Target Population score from PA Table 3 based on the populations using drinking-water from intakes that you do NOT suspect have been exposed to hazardous substances from the site.

Are any intakes part of a blended system? Yes ☐ No ☐
If yes, attach a page to show apportionment calculations.

6. **NEAREST INTAKE:** If you have identified any Primary Targets for the drinking water threat (Factor 4), assign a score of 50; otherwise, assign the Nearest Intake score from PA Table 3. If no drinking-water intake exists within the 15-mile target distance limit, assign a score of zero.

7. RESOURCES: A score of 5 is assigned.

T =

5

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Date:

PA TABLE 3: VALUES FOR SECONDARY SURFACE WATER TARGET POPULATIONS

Surface Water Body Flow Characteristics (see PA Table 4)	Population	Nearest Intake (choose highest)	Population Served by Intakes Within Flow Category											Population Value
			1	31	101	301	1,001	3,001	10,001	30,001	100,001	300,001	1,000,001	
			to 30	to 100	to 300	to 1,000	to 3,000	to 10,000	to 30,000	to 100,000	to 300,000	to 1,000,000	to 1,000,000	
< 10 cfs	_____	20	2	5	16	52	163	521	1,633	5,214	16,325	52,136	163,246	_____
10 to 100 cfs	_____	2	1	1	2	5	16	52	163	521	1,633	5,214	16,325	_____
> 100 to 1,000 cfs	_____	1	0	0	1	1	2	5	16	52	163	521	1,633	_____
> 1,000 to 10,000 cfs	_____	0	0	0	0	0	1	1	2	5	16	52	163	_____
> 10,000 cfs or Great Lakes	_____	0	0	0	0	0	0	0	1	1	2	5	16	_____
3-mile Mixing Zone	_____	10	1	3	8	26	82	261	816	2,607	8,162	26,068	81,663	_____
Nearest Intake =		0												Score = 0

PA TABLE 4: SURFACE WATER TYPE / FLOW CHARACTERISTICS
WITH DILUTION WEIGHTS FOR SECONDARY SURFACE WATER SENSITIVE ENVIRONMENTS

Type of Surface Water Body		Dilution Weight
Water Body Type	OR Flow Characteristics	
minimal stream	flow less than 10 cfs	1
small to moderate stream	flow 10 to 100 cfs	0.1
moderate to large stream	flow greater than 100 to 1,000 cfs	N/A
large stream to river	flow greater than 1,000 to 10,000 cfs	N/A
large river	flow greater than 10,000 cfs	N/A
3-mile mixing zone of quiet flowing streams or rivers	flow 10 cfs or greater	N/A
coastal tidal water (harbors, sounds, bays, etc.), ocean, or Great Lakes	N/A	N/A

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SURFACE WATER PATHWAY (continued)
HUMAN FOOD CHAIN THREAT SCORESHEET

	A	B	References
LIKELIHOOD OF RELEASE	Suspected Release	No Suspected Release	
Enter the Surface Water Likelihood of Release score from page 12.	LR = <u>550</u>		

HUMAN FOOD CHAIN THREAT TARGETS

8. Determine the water body types and flows (if applicable) for all fisheries within the 15-mile target distance limit. If there are no fisheries within the target distance limit, assign a Targets score of 0 at the bottom of this page and proceed to page 15.

Fishery Name	Water Body Type	Flow
<u>Recreational</u>	<u>Tidal/River</u>	<u>NA</u> cfs
	<u>(Estuarine)</u>	cfs
		cfs
		cfs
		cfs

9. PRIMARY FISHERIES: If you suspect any fishery listed above has been exposed to hazardous substances from the site (see Surface Water Criteria List, page 11), assign a score of 300 and do not evaluate Factor 10. List the Primary Fisheries:

10. SECONDARY FISHERIES: If you have not identified any Primary Fisheries, assign a Secondary Fisheries score from the table below using the LOWEST flow at any fishery within the 15-mile target distance limit.

Lowest Flow	Secondary Fisheries Score
< 10 cfs	210
10 to 100 cfs	30
> 100 cfs, coastal tidal waters, oceans, or Great Lakes	12

(300 or 0)	
0	
(210, 30, 12 or 0)	(210, 30, 12 or 0)
12	
(300, 210, 30, 12 or 0)	(210, 30, 12 or 0)
T = <u>12</u>	

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SURFACE WATER PATHWAY (continued)
ENVIRONMENTAL THREAT SCORE SHEET

LIKELIHOOD OF RELEASE

Enter the Surface Water Likelihood of Release score from page 12.

LR =

A	B
Suspected Release	No Suspected Release
100 550	500, 600, 300 or 1000

Reference

ENVIRONMENTAL THREAT TARGETS

11. Determine the water body types and flows (if applicable) for all surface water sensitive environments within the 15-mile target distance limit (see PA Tables 4 and 5). If there are no sensitive environments within the 15-mile target distance limit, assign a Targets score of 0 at the bottom of this page, and proceed to page 17.

Environment Name	Water Body Type	Flow
Habitat of Fed. Designated End/thr. species	Marine	N/A cfs
State " " " "	↓	↓ cfs
Wetlands	↓	↓ cfs
		cfs
		cfs

12. PRIMARY SENSITIVE ENVIRONMENTS: If you suspect any sensitive environment listed above has been exposed to hazardous substances from the site (see Surface Water Criteria List, page 11), assign a score of 300 and do not evaluate Factor 13. List the Primary Sensitive Environments:

13. SECONDARY SENSITIVE ENVIRONMENTS:

- A. For Secondary Sensitive Environments on surface water bodies with flows of 100 cfs or less, assign scores as follows, and do not evaluate part B of this factor:

Flow	Dilution Weight (PA Table 4)	Environment Type and Value (PA Tables 5 and 6)	Total
cfs	x	=	
cfs	x	=	
cfs	x	=	
cfs	x	=	
cfs	x	=	

Sum =

- B. If NO Secondary Sensitive Environments are located on surface water bodies with flows of 100 cfs or less, assign a score of 10.

T =

0	
0	
10	
10	

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PA TABLE 5: SURFACE WATER AND AIR SENSITIVE ENVIRONMENTS VALUES

<i>Sensitive Environment</i>	<i>Assigned Value</i>
Critical habitat for Federally designated endangered or threatened species	100
Marine Sanctuary	
National Park	
Designated Federal Wilderness Area	
Ecologically important areas identified under the Coastal Zone Wilderness Act	
Sensitive Areas identified under the National Estuary Program or Near Coastal Water Program of the Clean Water Act	
Critical Areas identified under the Clean Lakes Program of the Clean Water Act (subareas in lakes or entire small lakes)	
National Monument	
National Seashore Recreation Area	
National Lakeshore Recreation Area	
✓ Habitat known to be used by Federally designated or proposed endangered or threatened species	75
National Preserve	
National or State Wildlife Refuge	
Unit of Coastal Barrier Resources System	
Federal land designated for the protection of natural ecosystems	
Administratively Proposed Federal Wilderness Area	
Spawning areas critical for the maintenance of fish/shellfish species within a river system, bay or estuary	
Migratory pathways and feeding areas critical for the maintenance of anadromous fish species in a river system	
Terrestrial areas utilized by large or dense aggregations of vertebrate animals (semi-aquatic foragers) for breeding	
National river reach designated as recreational	
✓ Habitat known to be used by State designated endangered or threatened species	50
Habitat known to be used by a species under review as to its Federal endangered or threatened status	
Coastal Barrier (partially developed)	
Federally designated Scenic or Wild River	
State land designated for wildlife or game management	25
State designated Scenic or Wild River	
State designated Natural Area	
Particular areas, relatively small in size, important to maintenance of unique biotic communities	
State designated areas for the protection/maintenance of aquatic life under the Clean Water Act	5
✓ Wetlands	See PA Table 6 (Surface Water Pathway) or PA Table 9 (Air Pathway)

PA TABLE 6: SURFACE WATER WETLANDS FRONTAGE VALUES

<i>Total Length of Wetlands</i>	<i>Assigned Value</i>
Less than 0.1 mile	0
0.1 to 1 mile	25
Greater than 1 to 2 miles	50
Greater than 2 to 3 miles	75
Greater than 3 to 4 miles	100
Greater than 4 to 8 miles	150
Greater than 8 to 12 miles	250
Greater than 12 to 16 miles	350
Greater than 16 to 20 miles	450
Greater than 20 miles	500

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Site Name: Harrison Gas Plant

Date: 3-29-91

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**SURFACE WATER PATHWAY (concluded)
WASTE CHARACTERISTICS, THREAT, AND PATHWAY SCORE SUMMARY**

WASTE CHARACTERISTICS	A	B
	Suspected Release	No Suspected Release
14. A. If you have identified ANY Primary Targets for surface water (pages 12, 14, or 15), assign the waste characteristics score calculated on page 4, or a score of 32, whichever is GREATER; do not evaluate part B of this factor.	100 = 32	
B. If you have NOT identified any Primary Targets for surface water, assign the waste characteristics score calculated on page 4.	100, 32, or 18 18	100, 32, or 18
WC =	18	

SURFACE WATER PATHWAY THREAT SCORES

Threat	Likelihood of Release (LR) Score (from page 12)	Targets (T) Score	Pathway Waste Characteristics (WC) Score (determined above)	Threat Score $LR \times T \times WC$ / 82,500
Drinking Water	550	5	18	<small>subject to a maximum of 100</small> 0.60
Human Food Chain	550	12	18	<small>subject to a maximum of 100</small> 1.44
Environmental	550	10	18	<small>subject to a maximum of 100</small> 1.20

SURFACE WATER PATHWAY SCORE
(Drinking Water Threat + Human Food Chain Threat + Environmental Threat)subject to a maximum of 100

3.24

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Site Name: *Harrison Gas Plant*Date: *3-29-91*

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SOIL EXPOSURE PATHWAY SCORESHEET

Pathway Characteristics	
Do any people live on or within 200 ft of areas of suspected contamination?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Do any people attend school or day care on or within 200 ft of areas of suspected contamination?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Is the facility active? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, estimate the number of workers: <i>50</i>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

LIKELIHOOD OF EXPOSURE

	A Suspected Contamination	B No Suspected Contamination	References
1. SUSPECTED CONTAMINATION: Surficial contamination is assumed. A score of 550 is assigned. LE =	550		

RESIDENT POPULATION THREAT TARGETS

2. RESIDENT POPULATION: Determine the number of people occupying residences or attending school or day care on or within 200 feet of areas of suspected contamination (see Soil Exposure Pathway Criteria List, page 18). _____ people x 10 =	0												
3. RESIDENT INDIVIDUAL: If you have identified any Resident Population (Factor 2), assign a score of 50; otherwise, assign a score of 0.	0												
4. WORKERS: Assign a score from the following table based on the total number of workers at the facility and nearby facilities with suspected contamination: <table border="1"><thead><tr><th>Number of Workers</th><th>Score</th></tr></thead><tbody><tr><td>0</td><td>0</td></tr><tr><td>1 to 100</td><td>5</td></tr><tr><td>101 to 1,000</td><td>10</td></tr><tr><td>> 1,000</td><td>15</td></tr></tbody></table>	Number of Workers	Score	0	0	1 to 100	5	101 to 1,000	10	> 1,000	15	10		
Number of Workers	Score												
0	0												
1 to 100	5												
101 to 1,000	10												
> 1,000	15												
5. TERRESTRIAL SENSITIVE ENVIRONMENTS: Assign a value from PA Table 7 for each terrestrial sensitive environment that is located on an area of suspected contamination: <table border="1"><thead><tr><th>Terrestrial Sensitive Environment Type</th><th>Value</th></tr></thead><tbody><tr><td><i>Peregrine falcon</i></td><td><i>75</i></td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></tbody></table>	Terrestrial Sensitive Environment Type	Value	<i>Peregrine falcon</i>	<i>75</i>					75				
Terrestrial Sensitive Environment Type	Value												
<i>Peregrine falcon</i>	<i>75</i>												
6. RESOURCES: A score of 5 is assigned.	5												
Sum =	90												
T =	90												

WASTE CHARACTERISTICS

7. Assign the waste characteristics score calculated on page 4. WC =	18	
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RESIDENT POPULATION THREAT SCORE:

$$\frac{LE \times T \times WC}{82,500}$$

10.8

NEARBY POPULATION THREAT SCORE:

Assign a score of 2

2

SOIL EXPOSURE PATHWAY SCORE:

Resident Population Threat + Nearby Population Threat

12.8

DRAFTSite Name:
Date:

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**PA TABLE 7: SOIL EXPOSURE PATHWAY
TERRESTRIAL SENSITIVE ENVIRONMENT VALUES**

<i>Terrestrial Sensitive Environments</i>	<i>Assigned Value</i>
Terrestrial critical habitat for Federally designated endangered or threatened species National Park Designated Federal Wilderness Area National Monument	100
Terrestrial habitat known to be used by Federally designated or proposed threatened or endangered species National Preserve (terrestrial) National or State terrestrial Wildlife Refuge Federal land designated for protection of natural ecosystems Administratively proposed Federal Wilderness Area Terrestrial areas utilized by large or dense aggregations of animals (vertebrate species) for breeding	75
Terrestrial habitat used by State designated endangered or threatened species Terrestrial habitat used by species under review for Federally designated endangered or threatened status	50
State lands designated for wildlife or game management State designated Natural Areas Particular areas, relatively small in size, important to maintenance of unique biotic communities	25

SITE NAME: HARRISON GAS PLANT

SITE SCORE:

REVISED HAZARD RANKING SYSTEM
SCORING SPREADSHEET

VERSION 2.1

Developed for the U.S. Environmental Protection Agency
by
NUS Corporation

SITE NAME: HARRISON GAS PLANT

EPA ID #: NJD981134117

LOCATION: HARRISON, NEW JERSEY

REGION: 2

DATE: MARCH 29, 1991

RHRS SCORER: THOMAS J. MULDER

PATHWAY	SCORES
GROUND WATER MIGRATION PATHWAY	0.00
SURFACE WATER MIGRATION PATHWAY	0.00
Overland Flow/Flood	GW to SW
Drinking Water Threat	0.00 0.00
Human Food Chain Threat	0.00 0.00
Environmental Threat	0.00 0.00
Overland Flow/Flood Component	0.00
Ground Water to Surface Water Comp.	0.00
SOIL EXPOSURE PATHWAY	0.00
Resident Population Threat	0.00E+00
Nearby Population Threat	0.00E+00
AIR MIGRATION PATHWAY	12.52
OVERALL MIGRATION SCORE	

SITE NAME: HARRISON GAS PLANT

SITE SCORE:

TABLE 6-1
AIR MIGRATION PATHWAY SCORESHEET

FACTOR CATEGORIES AND FACTORS

LIKELIHOOD OF RELEASE	MAXIMUM VALUE	VALUE ASSIGNED
1. Observed Release	550	0
2. Potential to Release		
2a. Gas Potential to Release	500	360
2b. Particulate Potential to Release	500	280
2c. Potential to Release (highest value assigned in line 2a or 2b)	500	360
3. Likelihood of Release (higher of lines 1 or 2c)	550	360

WASTE CHARACTERISTICS

4. Toxicity/Mobility	*	1000
5. Hazardous Waste Quantity	*	10
6. Waste Characteristics	100	10

TARGETS

7. Nearest Individual	50	20
8. Population		
8a. Level I Concentrations	**	0
8b. Level II Concentrations	**	0
8c. Potential Contamination	**	265
8d. Population (lines 8a + 8b + 8c)	**	265
9. Resources	5	0
10. Sensitive Environments		
10a. Actual Contamination	***	0
10b. Potential Contamination	***	2
10c. Sensitive Environments (lines 10a + 10b)	***	2
11. Targets (lines 7 + 8d + 9 + 10c)	**	287

AIR MIGRATION PATHWAY SCORE

12. Air Pathway Score (Sa) [(lines 3 x 6 x 11)/82,500]]****	100	12.52
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SITE NAME: HARRISON GAS PLANT
 SOURCE 1 NAME: CONTAMINATED SOIL

SITE SCORE:

HAZARDOUS WASTE QUANTITY	VALUE	SOURCE TYPE (choose one)
Constituents (lb) -	0	Landfill
HWQ (lb)	0	Surface Impoundment
Volume (cu yd)	0	Surface Impoundment(buried)
Area (sq ft)	653400	Drums
Contam Area(sq ft)	653400	Tanks & Non-drum Containers
Final HWQ for the Source	19.21764	1 Contaminated Soil
		Pile
HAZARDOUS SUBSTANCES		Land Treatment
ATTRIBUTABLE TO THE SOURCE		Other

* CODE	CONTAMINANT	CONTAINMENT	VALUES
L42	Benzene	Ground Water Containment	0
L100	Naphthalene	(Table 3-2)	
L102	Xylene, o-	Surface Water (overland)	0
L103	Xylene, p-	(Table 4-2)	
L106	Phenol	Flood Plain (years)	
L113	Styrene	(1, 10, 100, 500, NA)	NA
L121	Toluene	Flood Frequency Value	0
L151	Benzene carbonyl chloride	(Table 4-9)	
L186	Cresol, m-	Attractiveness/Access.	0
L187	Cresol, p-	(Table 5-6)	
L294	Pyridine	Air Containment (gas)	10
L151	Benzene carbonyl chloride	(Table 6-3)	
		Air Containment (part.)	10
		(Table 6-9)	
		Air Source Type (gas)	19
		(Table 6-4)	
		Air Source Type (part.)	22
		(Table 6-4)	

* Type an "L" in front of the Code # if the substance is present or was deposited as a liquid (i.e., L##).

AIR MIGRATION PATHWAY SCORESHEET

LIKELIHOOD OF RELEASE	MAXIMUM VALUE	ASSIGNED VALUE
Is there an Observed release to Air?	Y/N	N
If Yes: CODE CONTAMINANT		

(Note: P## for particulate)

1. Observed Release -	550	0
2. Potential to Release		
2a. Gas Potential to Release	500	360
Containment		10
Source Type		19
Gas Migration Potential		17
2b. Particulate Potential to Release	500	280
Containment		10
Source Type		22
Part. Migration Potential		6
2c. Potential to Release	500	360
3. Likelihood of Release	550	360

WASTE CHARACTERISTICS

Particulate Mobility Value		0.0002
4. Toxicity/Mobility	*	1000
5. Hazardous Waste Quantity	*	10
6. Waste Characteristics	100	10

TARGETS

Distance to Nearest Individual (miles)		0
7. Nearest Individual Value	50	20
8. Population		
Level I Population		0
8a. Level I Concentrations Value	**	0
Level II Population		0
8b. Level II Concentrations Value	**	0
Potential Contamination		

Distance	Population	Value
On a source	50	53
0 - 1/4	200	41
1/4-1/2	6450	282
1/2-1.0	34700	834
1.0-2.0	107080	833
2.0-3.0	155340	375
3.0-4.0	206040	229

8c. Total Potential Contamination Value	**	265
8d. Total Population	**	265
9. Resources	5	0

SITE NAME: HARRISON GAS PLANT

SITE SCORE:

10. Sensitive Environments

10a. Actual Contamination	***	0
Wetland	Other Environ	Total
Acreage Value	Value	Value
0 0 -	0	0
Potential Contamination		

Distance	Wetland Acreage	Value	Other Sens. Env.	Total Value
On a source	0	0	0	0
0 - 1/4	0	0	75	18.75
1/4-1/2	0	0	0	0
1/2-1.0	0	0	0	0
1.0-2.0	0	0	0	0
2.0-3.0	0	0	0	0
3.0-4.0	0	0	0	0

10b. Total Potential Contamination Value	***	2
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Total Sensitive Environments	***	2
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10c. Sensitive Environments Value	**	2
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11. Total Targets	**	287
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AIR MIGRATION PATHWAY SCORE

Air Pathway Score: Uncapped	**	12.52
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12. Air Pathway Score	100	12.52
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Site Name: Harrison Gas Plant
Date: 3-29-91

SITE SCORE CALCULATION

	S	S ²
GROUND WATER PATHWAY SCORE (S _{gw}):	1.08	1.17
SURFACE WATER PATHWAY SCORE (S _{sw}):	3.24	10.50
SOIL EXPOSURE PATHWAY SCORE (S _{so}):	12.8	163.84
AIR PATHWAY SCORE (S _a):	12.52	156.75
SITE SCORE:	$\sqrt{\frac{S_{gw}^2 + S_{sw}^2 + S_{so}^2 + S_a^2}{4}}$	9.11